356 /386 cont./
342 meanwhile airs out thoroughly, is completely cleansed by the rain, and after considerable time is again suitable as a temporary refuge. With this in mind they leave the first dwelling undamaged when they move out, and upon their return they need make only a few additions. Again, unreasoning nature helps where these Indians themselves are lacking in cleanliness. Even though the dwelling may be changed, certain circumstances may make it imperative to remain for a longer period in one place. When such circumstances are absent, every family unhesitatingly and at frequent intervals moves its campsite a great distance.

342 Each individual family erects a dwelling exclusively for itself wherever it temporarily happens to be. Formerly, however, in the west an exception was made where a hut known as ā́yusuēkēr was built to be occupied by several families. The reason for this [187] was either the prophetic warning of a few yékamuš who predicted a severe winter or the stranding of a whale at the beginning of the cold season. Three to six families who were related or friends joined in the building of this community hut. They chose a suitable spot near the stranded whale or near the swamp where they • [251] preserved large pieces of fat in the water, in any case on dry ground and particularly well protected from wind and weather by a high rock. The men taking part in the construction of the dwelling, the customary dome-shaped hut, but elongated in this case, fetched suitable poles and built a stable, unusually strong framework.

They devoted great care to this work, which therefore occupied them all for perhaps half a day, whereas the ordinary dome-shaped hut took only two to three hours and the conical hut even less time. The length and width of this communal dwelling depended on the number of occupants, and the height of the interior was increased somewhat to prevent any discomfort that might be caused from the smoke of the larger fire. An unusually thick cover was laid on the firm framework, consisting of several alternate layers of tree bark and grass, rushes and twigs, with large, thick pieces of leather occasionally inserted between them. Thongs were stretched over large areas in order to /387/ secure the outer cover firmly. An entrance was left on each of the two narrow ends, and this was covered with a leather hanging. Both entrances were

/387 cont./

372 342 openings in the top prevented it from escaping easily. The entire structure was well insulated, for it was meant to offer special protection against the rigors of the climate. Since it was built in the damp western part where dry firewood was not available in large quantities, the Indians managed by constantly carrying green wood into the hut and piling it up. In a few days it was dry and only then was used for burning. Even a supply of tussock grass [513] (Poa flabellata) was kept on hand, for this litter for the bed had to be renewed at least every two weeks.

• 251 The men supplied the necessary food for their families on communal hunting expeditions which were usually so successful that a good share of the booty could be stored away for a few days. This helped in periods when the hunt was seriously hindered by continuous stormy weather. They were anxiously concerned about having an abundant supply of meat always on hand, if not perhaps a whale /388/ lying on the shore. Otherwise the gathering of many people in the same place in a securely built hut would not only be pointless, but even dangerous. Inevitably the inhabitants frightened the game farther and farther away from the dwelling, which made hunting increasingly difficult. Then only ample stores kept off the threatening specter of hunger.

342 362 221 A hut for several families was occupied only in winter. Wanderlust was too strong to detain a family in one spot any length of time for other reasons. The people who built a communal hut would perhaps come back to it for a second winter, but not after that, for the game supply had been exhausted over a wide area, and they themselves were kept away by the boredom of sitting still. The arrangement described here might be referred to as the "winter hut." Near it a sort of winter supply was piled up. The very safe shelter provided somewhat comfortable living [517] conditions, and during the long periods of inactivity together, favorite myths and legends were repeated, or the people told each other stories of their own experiences and Hámmus stories. Communal huts were not built in the east, and the reason is simple: weather and hunting conditions were much more favorable there.

342 593 After a few families have settled in the so-called multiple-family hut, they not infrequently erect another building directly beside it for the half-grown children, and this is appropriately known as the "children's hut." It resembles the first hut in shape

/424 cont./

356 of indifference toward even their meager possessions and to teach them at least a modicum of care in regard to the things they need. At present some families have built themselves simple little houses in Puerto Mejillones and partly furnished them with European furniture (p. 357 /untranslated/), but they do not worry about leaving all this for months and are hardly aware of heavy losses. Expensive things that are given them are treasured for a few hours, out of curiosity; after that they thoughtlessly let everything deteriorate in the mud and wet. The less they own, the more /425/ comfortably they can travel, and what is ruined they occasionally replace. Hence they are completely indifferent to any material possessions.

Nevertheless they do not neglect themselves to the extent of perishing in dirt and disorder. They are consciously concerned with necessary cleanliness. They never build their huts in places that are malodorous and swampy, or where a large animal carcass is decaying. They do not tolerate the smell of decaying animals. Hence they immediately throw into the fire all waste from their meals and the remnants of skins or leather pieces that they are working on. Small animals and pieces of meat
•[251] obtained by hunting are hung on branches outside the hut where they are protected from the dogs and from the uneven heat of the fire. They promptly remove meat that is decaying or that smells musty; they are extremely annoyed by its stench. On the other hand, the heavy, nauseous fumes of blubber and sea animals that fill their hut and deter every European do not seem to affect them, nor are they sensitive to the putrid odors issuing from the long piles of algae and seaweed, sea animals, and shells that the agitated ocean tosses ashore in tangled disorder and that are subsequently exposed to the hot rays of the sun. If a man has been successful on the hunt, he sometimes brings the slain animal to the hut intact, but he removes the entrails some distance away. The women, for their part, go down to the edge of the water when they pluck birds and eviscerate them, so that the waves can carry off the refuse. The litter for the bed is renewed after a few days, for the dampness of the earth promotes mold and rot. On sunny days they even pull down the large leather pieces from the hut framework, so that the interior will dry out and air. If they stay in one place for any length of time, they

/555 cont./

the year round abundant /cited in English/ (MM:III,116;1869). He is saying a little too much in the first part of this statement.

not in a position to give all of these their exact botanical names. It is very remarkable that he eats only those that grow on trees, never those growing on the ground. Each species matures in one particular month, which is why the Indian could at any time give himself a little variety in his monotonous meat diet by using fungi. "Fungi of many kinds are also all the year round much used as food, different kinds coming in at different seasons" /cited in English/ (Bridges [a]:213).

It is left to each individual to hunt occasionally for a few fungi whenever he feels like it. The only ones actually gathered are the very common Cyttaria darwinii which are strung up on small sticks in the hut and kept for a time in a dried state. Bridges (MM:VII,121;1873) is obviously exaggerating when he attaches special significance to fungi in the daily household of the Yamana. When there is a famine, however, the people use fungi to help out as long as they can find them. Aspinall:270 expresses himself more accurately when he speaks of the individual foods in order of their importance: "For their subsistence [these Indians] are dependent solely on the hunt; /556/ in an emergency they content themselves with a diet of mussels. Digestive difficulties that may result from this are healed with a diet of fungi." Fungi are neither more nor less than a rare, occasional addition to the main diet.

2. Berries. It is obvious that the Yamana can enjoy berries, amáim, for only a few weeks. The most common are amáiitegur̆, the fruit of Pernettya mucronata which sometimes covers extensive areas in the form of a low shrub (Fig. 12 /untranslated; see foreign text, p. 121/). In spite of the hard points on the leaves, women and girls move through the bushes and pick the ripe crimson berries, gather them in their little baskets, and take them to their hut. Less common in that region is the /Fig. 67 appears here/ smaller Pernettya pumila (Fig. 67), the fruit of which is called yanamáim, and the somewhat taller Empetrum rubrum, aš́ána, the fruit of which is known as šepisamáim. These two bushes have only small fruits which attract the Indians less.

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the news must spread abroad, and then a rush of people happens, they are disappointed by coming too late, and should those who hoarded up the blubber not part it out, there is a fight, canoes are broken, and this brings on a general engagement" /cited in English/. As we have said, however, these are rare occurrences.

dead whale is announced over a wide area, and many people hasten there, even from afar. In comparison with these, the ones that first take possession of it are always in the minority.

225 It hardly seems possible, but in the end even a whale is not an inexhaustible source of fat and meat. If 20 families -- usually, however, the number is doubled and quadrupled -- descend on this sea monster, eating excessively and storing large masses of [251] fat in the swamp, the supply diminishes perceptibly. Sometimes many people will leave after about a week, tired of the monotonous diet, and will make room for others. The new arrivals pounce on the rest ravenously, and it diminishes all the more quickly the more numerous they are. A whale has probably never lasted for more than a month, even if it was one of the largest species, such as hašuwípisa (Balaenoptera intermedia), and was an extraordinarily large specimen, kupatmérana. Sooner or later the skeleton lay there pretty much cleaned of meat and fat, left to the further cleansing of rain and waves.

Lewis, from his own experience, reported on October 9, 1871, about a seemingly mortally weary small whale (351) which was

351. "It was a whale, very young, about 17 feet in length" /cited in English/.

effortlessly killed near the coast on September 13th. "The process of dissection was carried on with such zest, that by eleven A.M. the same day not a vestige of flesh or bone remained on the spot, save the liver, not eaten as a rule by the natives. Our poor fellows jumped into the almost freezing water nearly up to their armpits, and applied themselves as I had never previously seen them do;

/594 cont./

214 these if possible. The tender meat of young animals tickles his
151 palate, and the height of ecstacy for him is the nicely browned fat of a whale that has been stranded for some time. There are many things that conclusively prove that a Fuegian's taste is by no means insensible or dulled, no matter how uniform the taste of everything that he eats on account of so much blubber.

5. How They Store Food

•251 The unsettled way of life and their uninterrupted changes of
261 dwelling do not permit the Yamana to lay in large supplies. The general statement of Hyades (d):306 "They do not make any provision for the future" /translated from French/, applies without qualification, since they do not strive to provide for the immediate or the distant future. A decisive factor may be that food does not keep in that arbitrarily inclement weather, and in order to preserve it, one would have to go through all kinds of complicated preparations. All this is superfluous, because throughout the entire year and with almost limitless generosity the sea puts all kinds of animals at the disposal of the man who hunts and the woman who gathers. Storm or accident will deprive a family of these things for no more than a few days. Generally no one need reckon with the danger of hunger, and everyone almost anywhere finds an abundance of what he needs (381).

381. Bridges' (h):205 brief statement says a great deal: "In general, food is abundant" /translated from Spanish/.

Why, then, should anyone worry about food for the future (382)!

382. Hyades (g):34 writes: "The most wonderful thing about the Fuegians is that they never think of providing for the next day. And yet winter is severe enough and there are by no means few periods when the Fuegian can neither hunt nor fish nor even pick up mussels on the rocks

/384 cont./

•251 261

pounded by the surf." He is obviously exaggerating the dangers of hunger and distress to which these natives on Cape Horn are exposed.

Nevertheless, the surplus that is left over for the people by a stranded whale is regularly stored, simply because they do not like to let the huge masses of fat and meat spoil and because they would like to give themselves the great treat of roasted whale fat another time. It would be utterly erroneous to see in this endeavor any specific provision, /385/ for, if the stranded animal is young and the number of people that have hastened to it is unusually large, all the fat and all the meat are consumed within a few days, the only exception being that some family or another will carry a few pieces around with them somewhat longer. Thus, they save only what the individual families cannot and do not wish to consume in the vicinity of the whale. The consumption of the fat and meat of this animal exclusively is wholesome for the human body only for a certain length of time.

251 Most of the people transport the entire canoe-load to their home area. Here they put the large pieces in a swamp with good drainage and secure them well between the tangles of peat and roots at a certain depth. The dark-brown water excludes light and air. To prevent them from being washed up, they are weighted down with flat stones or logs, which also protects them from foxes and dogs. Undoubtedly the abundance of soluble salt acts as a preservative, and the tannic acid probably also helps. The pieces put down are never so thick that they cannot be completely soaked and pickled. It is clear that this produces an improvement in the flavor. The natives justifiably praise the advantages of conserved fat, even if it has lain in the swamp for several months (383). Occasionally, if chance permits, the

383. Fred Lawrence found a piece that had lain in the swamp for a year and a half still tasty. Our Indians know that their preserves are safe in it for a long time. "They hoard up the blubber for months by burying it in mud

/595 cont./

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under a run of fresh water" /cited in English/, Bridges (a):208 explained. Compare Dabbene (b):186, Wieghardt: 35, and others.

family will return to the place where they have preserved their whale fat. It is probably never hunger that impels them. They use a stick and poke around in the brown water to find the pieces, which have meanwhile usually sunk somewhat. If they touch a soft, pliable mass, they have reached their goal (384).

384. BD:240 lists gaiatenaka, "to search for, feel or seek for with the end of a stick as for blubber buried in mud" /cited in English/.

The surface layer of the lappet of fat, which has usually turned very brown, is removed from the roast (385). No matter how

385. Martial:193 describes how the superfluous fat of a stranded whale is preserved in the same way.

oppressive the odor is for a European, it does not disturb the Yamana in his enjoyment of it (386).

386. The words of Martial:193 are not exaggerated: "Sometimes the animal is in an advanced state of decomposition and gives off an unbearable odor, but it does not in the least disgust them" /translated from French/.

In comparison with these masses of fat that individual families preserve in the swamp, the drying of ripe Cyttaria fungi, auscir, is quite unimportant. They are strung on little sticks and dried in the radiant heat of the fire (387). In order to keep them more

387. Bridges (MM:VII, 120;1872) also assures us that "this fungus is very generally

1: Gusinde--239 E-5 (1918-1924) 1937 5916 Yahgan 5916

/595 cont./

251 thus cured, and eaten some months after it has been out of season" /cited in English/. Compare Hyades (q):340.

conveniently in small baskets and leather bags, they are stripped off the little sticks and /596/ left as they are or made into a wreath on a few flexible rush stalks (Marsippospermum). Since they have been baked until they are quite hard, they resist the dampness of the air for a long time. Before they are eaten, they are soaked in liquid blubber (p. 324). For the final weeks of winter the woman keeps about 50 or 60 of these dried fungi, but only as a delicacy, not out of foresight, since fresh ones can be picked almost all the year round and no one wants to burden himself with them for long.

461 Basically our Fuegians know that they need not fear for the future, hence they do not pile up supplies. Year in and year out they can look forward to the next day, free of care. Despite all the monotony of their food, they always have an abundant amount at their disposal. At the same time, many a change and stimulus for the palate are afforded, for everyone has unimpeded access to anything and everything that Mother Nature is in a position to offer from her animal and vegetable kingdom (388).

388. It is only in this sense that we can interpret what Hyades (p):328 says, namely, that "there are never preferred foods" /translated from French/.

In order to characterize briefly the value of their diet according to vitamin content, I should like to remind the reader that the A-vitamins, the so-called anti-xerophthalmic vitamins, occur abundantly in liver oil. Blubber, as is well known, has by far the greatest amount of vitamin A, namely, 300 times as much as butter fat, besides a great deal of the anti-rachitic D-vitamin. Several animal tissues furnish the anti-scorbutic C-vitamin, as well as the anti-neuritic B-vitamin.

/1444 cont./

b. General Knowledge

The endowment that each child brings into this world as his heritage from his parents and as his natural equipment shows many different gradations even here in Tierra del Fuego. The aptitude of the individual is developed in actual education, at first in the parental hut, later in the Yékaga. Adults regard their own /1445/ efforts to train growing youngmen as a serious duty which they perform daily, so to speak. Tirelessly they watch their children, they show them this and that operation, explain one thing and another to them, demonstrate this and that, ask their own questions and

Fig. 98. Piece of Gut Filled with Blubber. Two-thirds natural size.

answer those of youthful questioners, observe the latter's progress and warn them of a wrong course. Although this instruction is primarily designed to help the younger generation obtain great proficiency in the use of weapons and implements, nevertheless in their daily contact the adults also give general information and occasionally special knowledge about definite usage and customs, about religion and mythology in the broadest sense of the term. Step by step and gradually, as circumstances advise and the mental maturity of the young person demands it, he learns more and more about the rich and manifold fund of knowledge of his tribe. There can be no question of orderly lessons; explanations and comments are given on occasions offered in everyday life, the boys being taught primarily by the male, girls by the female adult tribal members, chiefly by relatives within the family group.

J. Cooper E-4 (no date) 1946 5005 Tehgan 5006

262 Latorre (1888, p. 32) rated the relative importance in the *Tehgan* dietary of their foods as follows: (1) Rarity of first importance, animals; (2) meat, seals, and fish of many kinds; (3) meat, porpoises, gulls, and bird eggs; (4) clam, whales, limpets, crabs, sea urchins, geese, penguins, cormorants; (5) lost and land, otter (chiefly in the west), guanaco (only in the east), condor, ducks, berries (especially wild black currants). The fungi eaten were those growing on trees; those growing on the ground were not eaten. Roots wild celery and wild parsnips and two varieties of cress and young shoots of tussock grass were also eaten. Grass was eaten only in famine as a last resort. Salt was not used.

225 Hunting.—Seals were hunted with spear or harpoon from canoes or from land (pl. 36), or killed with clubs. Whales were occasionally hunted in the open sea with spear or harpoon; stranded or dead whales were eagerly exploited. Dogs helped in otter and fox hunting. 223 Cormorants were taken at night by torchlight with clubs; also with a pronged wooden gorge hook. Birds were taken with pole snares (fig. 11, *d*) and with single or multiple tether snares of sinew or whalebone. By lifting pole snares, deadfalls, or pitfalls are reported.

224 Fishing and sea-food gathering.—Mussels were gathered by hand; limpets, with a flat-ended stick; sea urchins, with a four-pronged wooden fork; crabs and other Crustacea, with a harpoon or a three-pronged stick. For taking sea food, the *Tehgan* also used a spear with two diverging shanks, or two to four spears lashed together. Women fished with a kelp-stem or braided whale-sinew line, that had a shipbeard of whalebone or of quill at the end, instead of a hook, to hold the bait; slowly drawing the fish to the surface, they would grab it by hand. Fishhooks were probably lacking. Weirs of branches or stakes were used. True fish nets were absent. The innermost approach thereto was a small basket attached to the end of a pole and used as a sort of dip net for diminutive fish.

251 Food storage.—Limited quantities of dried tree fungi were stored; so too was oil, especially whale and seal oil.

415 Food preparation and eating.—Large mussel shells were used for melting fat and boiling grease. Water was heated and grease melted 248 by throwing hot stones into them, but there is no record of stone boiling proper.

Shells of large mussels were sometimes used as plates; shells or bark ladles as cups; hollow bird bones or reeds as drinking tubes.

CAMPS AND HABITATIONS

361 There were no permanent villages. Certain groups of natives re-
621 lated apparently by blood and marriage frequented and occupied more or less fixed separate localities within the respective five sub-

3: Lothrop E-5 (1924-1925) 1928
S366 Yahgan S366

the introduction of the potato to New Zealand, Tierra del Fuego is the only part of the world where cryptogamic plants form the chief vegetal diet.

However, the Fuegian Indians failed to utilize many native food plants of value, such as wild celery, two kinds of cress, wild sorrel, wild parsnip, scurvy grass, and mushrooms.

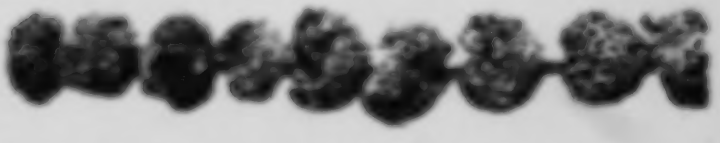

FIG. 2.—Fungi found on a rotted fire wooden axe. Length, 6 in. (142279)

No description of the flora of Tierra del Fuego can omit mention of the gigantic kelp (*Fucus gigantius*) which almost everywhere fringes the coasts. Though the stems are not thick, they often exceed a hundred feet in length. Darwin[1] picturesquely writes: "I can only compare these great aquatic forests of the southern hemisphere with the terrestrial ones in the intertropical regions. Yet if the latter should be destroyed in any country, I do not believe that nearly so many species of animals would perish, as, under similar circumstances would happen with the kelp. Amidst the leaves of this plant numerous species of fish live, which nowhere else would find food or shelter; with their destruction the many cormorants, divers, and other fishing birds, the otters, seals, and porpoises, would soon perish also; and lastly the Fuegian savage, the miserable lord of this miserable land, would reluctantly his cannibal feast, decrease in numbers, and perhaps cease to exist." The kelp forms an excellent breakwater and mooring for canoes, but it is an impenetrable barrier to swimmers and has prevented many unfortunate occupants of overturned canoes from safely reaching the shore. Its appearance on the surface of the water may be seen in pl. xvi, top, and pl. xx, top.

FAUNA

From the Indian point of view what made Tierra del Fuego a suitable land for habitation was the edible fauna, which in turn

[1] 1839, p. 268.

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6

undermined by this animal, recall the gopher burrows in western North America. 136

The Fuegian dog is not known in a wild state, and today it is extinct, although much blood of the native breed must run in the veins of the innumerable sheep dogs and hounds to be found on the island. In height the native dog ranged from 11 to 20 inches. Their ears were pointed, muzzles sharp, and skulls broad. The markings were black and white, with tan running-gear. Like most Indian dogs they lived largely on such garbage as they could pick up around the encampment, but in times of plenty they were given meat or mussels by their masters. Also occasionally they might pull down a guanaco and enjoy a square meal before the arrival of the hunter, as illustrated in the legend of Kuanip, presented later. 231

Of the sea animals, the four kinds of seal found in Fuegian waters formed the principal meat diet of the Yahgan. Not only did they eat the seal, but they used its hide for capes, moccasins, house-tops, and thongs. It is surprising they never invented a hide boat, which would have been much less perishable than their bark canoes. The Haush also ate a great many seal, and the Ona ate seal but did not specialize in its pursuit. 136

Otter of three kinds, one living on land and two in the sea, were prized by both Yahgan and Alacaluf, who used their skins for clothing. Both these peoples attacked porpoises, and at times, when some innate instinct assured them of good weather, they pursued them far into the open sea.

To the Fuegian tribes whale was a great delicacy, and by all accounts this leviathan existed in large numbers in Fuegian waters until recently. Sometimes the Canoe Indians ventured to attack whales that had blundered into shallow water, but usually they were secured dead on the beaches. These were gala occasions, and feuds and animosities were forgotten as great numbers gathered to gorge themselves on the often putrid, diseased, and stinking flesh. When satiated, the Yahgan sometimes buried a meat supply far under ground where, were there frost, it might be preserved for many months. This custom recalls the burying of salmon on the northwest coast of North America, where the decomposed fish was mixed with oil and eaten with gusto. [251]

Fuegian waters abound in fish, both large and small, which were eaten by all the tribes. The Ona took fish from pools at low tide, 136 226